

CLAIMS:

1. A spherical bearing arrangement having a bearing housing and a ball located therein, the bearing housing having an outer housing, an inner housing and an annular elastomeric portion sandwiched between the outer and inner housings, wherein the housings and the annular elastomeric portion surround the equator of the ball and the inner housing and the annular elastomeric portion are curved around the ball.
- 10 2. A bearing arrangement according to Claim 1, wherein the elastomeric portion is bonded to the inner housing.
3. A bearing arrangement according to Claim 2, wherein the elastomeric portion is bonded to the inner housing by an injection process.
- 15 4. A bearing arrangement according to any preceding claim, wherein the elastomeric portion is bonded to the outer housing.
5. A bearing arrangement according to any preceding claim, wherein a liner 20 is provided on the inner housing in contact with the ball.
6. A bearing arrangement according to Claim 5, wherein the liner is a self-lubricating liner.
- 25 7. A bearing arrangement according to any one of Claims 1 to 4, wherein the inner housing and ball are both manufactured from metal and the inner housing is in direct contact with the ball.

8. A bearing arrangement according to any preceding claim, wherein the elastomeric portion is rubber.
9. A method of manufacturing a spherical bearing comprising the steps of:
 - 5 swaging an inner housing onto a ball;
 - providing an annular elastomeric portion around an outer surface of the inner housing; and
 - swaging an outer housing onto the elastomeric portion.
10. 10. A method according to Claim 9, wherein the step of providing the annular elastomeric portion around the outer surface of the inner housing comprises bonding an elastomeric portion to the outer surface of the inner housing.
15. 11. A method according to Claim 10, wherein the elastomeric portion is applied by an injection process.
12. A method according to any one of Claims 9 to 11, wherein the outer housing is swaged onto the elastomeric portion.
20. 13. A spherical bearing arrangement substantially as hereinbefore described with reference to and as shown in the accompanying drawings.
25. 14. A method of manufacturing a spherical bearing substantially as hereinbefore described with reference to and as shown in the accompanying drawings.

AMENDED CLAIMS

[received by the International Bureau on 01 September 2004 (01.09.04);
original claims 1-14 replaced by amended claims 1-12 (2 pages)]

1. A method of manufacturing a spherical bearing comprising the steps of:
swaging an inner housing onto a ball;
providing an annular elastomeric portion around an outer surface of the inner housing; and
swaging an outer housing onto the elastomeric portion.
2. A method according to Claim 1, wherein the step of providing the annular elastomeric portion around the outer surface of the inner housing comprises bonding an elastomeric portion to the outer surface of the inner housing.
3. A method according to Claim 2, wherein the elastomeric portion is applied by an injection process.
4. A method according to any preceding claim, wherein the outer housing is swaged onto the elastomeric portion.
5. A spherical bearing arrangement having a bearing housing and a ball located therein, the bearing housing having an outer housing, an inner housing and an annular elastomeric portion sandwiched between the outer and inner housings, wherein: the outer housing has an outer surface to allow the outer housing to be securely held in an interference fit hole; the housings and the annular elastomeric portion surround the equator of the ball; and the inner housing and the annular elastomeric portion are curved around the ball.

6. A bearing arrangement according to Claim 5, wherein the elastomeric portion is bonded to the inner housing.
7. A bearing arrangement according to Claim 6, wherein the elastomeric portion is bonded to the inner housing by an injection process.
8. A bearing arrangement according to any one of Claims 5 to 7, wherein the elastomeric portion is bonded to the outer housing.
9. A bearing arrangement according to any one of Claims 5 to 8, wherein a liner is provided on the inner housing in contact with the ball.
10. A bearing arrangement according to Claim 9, wherein the liner is a self-lubricating liner.
11. A bearing arrangement according to any one of Claims 5 to 8, wherein the inner housing and ball are both manufactured from metal and the inner housing is in direct contact with the ball.
12. A bearing arrangement according to any one of Claims 5 to 11, wherein the elastomeric portion is rubber.